

BEST AVAILABLE COPY

APPENDIX A

chlor. See chloro.

chloral (trichloroacetaldehyde) CCl_3CHO .
Properties: Colorless, mobile, oily liquid; penetrating odor. Sp. gr. 1.505 (25/4°C); m.p. -57.5°C; b.p. 97.7°C; vapor pressure 35 mm (20°C); index of refraction (n_D) 1.4557; latent heat of vaporization 97.1 Btu/lb. Soluble in water, alcohol, ether and chloroform; combines with water forming chloral hydrate.

Derivation: (a) By the chlorination of ethyl alcohol, addition of sulfuric acid, and subsequent distillation; (b) by the chlorination of acetaldehyde.
Grades: Technical, 94% min.
Containers: Drums; glass bottles; tankcars.
Hazard: Highly toxic; strong irritant; ingestion or inhalation may be fatal. MCA warning label.
Uses: Manufacture of DDT; organic synthesis; limonene. Shipping regulations: (ICC, IATA) Poison label.

chloralamide. See chloral formamide.
 $\text{C}_2\text{Cl}_3\text{CHOHNHOCH}$.
Properties: Colorless, lustrous crystals; odorless; slightly bitter taste. Soluble in water (hydrolyzes at 60°C), alcohol, ether and glycerol. M. p. 114-115°C; decomposes at higher temperatures.
Use: Medicine.

chloral hydrate ("knockout drops"; trichloroacetaldehyde, hydrated; trichloroethylidene glycol)
 $\text{C}_2\text{Cl}_3\text{CHOH}_2$.
Properties: Transparent, colorless crystals; aromatic, penetrating, slightly acrid odor and slightly bitter, sharp taste. Slowly volatilizes when exposed to air. Soluble in water, alcohol, chloroform, and ether; also soluble in olive oil and turpentine oil. Sp. gr. 1.90; m.p. 52°C; b.p. 97.5°C.
Derivation: Action of 1/5 of its volume of water on chloral.
Grades: Technical; U.S.P.
Hazard: Highly toxic; dangerous to eyes; hypnotic drug, overdosage may be fatal.
Uses: Medicine (sedative); manufacture of DDT; liniments.
Shipping regulations: (ICC, CG, IATA) Poison label.

chloral hydrate antipyrine (antipyrine chloral hydrate)
 $\text{C}_{11}\text{H}_{12}\text{N}_2\text{OCl}_3\text{C}_2\text{H}_5\text{OH}$.
Properties: Colorless crystals; moderately soluble in water; soluble in alcohol; m.p. 67°C.
Hazard: Probably toxic.
Use: Medicine (sedative).

chlorambucil (4-(parabisis(2-chloroethyl)amino)phenyl)butyric acid) $(\text{C}_6\text{Cl}_3\text{H}_2\text{NC}_6\text{H}_4(\text{CH}_2)_3\text{COOH})$. A nitrogen mustard derivative.
Properties: Off-white powder; m.p. 65-69°C. Slightly soluble in water; soluble in acetone and ether.
Grade: U.S.P.
Hazard: Highly toxic.
Uses: Medicine; insect sterilant.

Shipping regulations (ICC, CG, IATA) Poison label.
chloramphenicol. See chloral formamide.

reinforced plastics.
chloroacid. See anthraquinone-1,8-disulfonic acid.
chloroego acid. See 8-amino-1-naphthol-5,7-disulfonic acid.

A thermoplastic, gumlike substance obtained from the latex of the sapodilla tree native to Mexico and Central America. Softens at 90°F. Insoluble in water; soluble in most organic solvents. Chief use is chewing gum, after incorporation of sugar and specific flavoring. Nontoxic, but ingestion should be avoided.

chloranilic acid. See sodium nitrate.

chlorate salt. See sodium nitrate.

chlorina. See quillaja.

chlorina clay. See kaolin.

chloro-wood oil. See tung oil.

chloro-bean oil. See soybean oil.

chloro-blue. See iron blues.

chloro-cinnamon oil. See cassia oil.

chloro-gelatin. See agar.

chloro-isinglass. See agar.

chloro-rhubarb. See rhubarb.

chloro-wax (insect wax; Chinese tree wax; vegetable emulsifier). White to yellowish-white solid; nearly odorless and tasteless. Soluble in alcohol, chloroform, benzene, and naphtha. Insoluble in water. Sp. 0.970; m.p. 80-83°C. Combustible.

Derivation: Secreted by an insect *Coccus cerasiferus*, the wax is deposited on the branches of trees and is removed by hand and melted in boiling water to remove dirt, bark, etc.

Method of purification: Filtration.

Grades: Crude.
Containers: Burlap bags; wooden barrels; multiwall paper sacks.

S: Paper size; furniture, leather, and shoe polishes; treating cotton fabrics.

chloro-white. See zinc oxide.

chloro-acid. See quinic acid.

chloro-quinidine.

"Cal."¹¹⁷ Trademark for low-lime calcium arsenite and powder (85% tricalcium arsenite) form.

Hazard: Highly toxic by ingestion.

"Cato."¹¹⁸ Trademark for a series of organic seed treatments based on methyl mercury.

Hazard: Highly toxic by ingestion.

A glucosamine polysaccharide. Contains about nitrogen, and is structurally similar to cellulose.

Principal constituent of the shells of crabs, lobsters, beetles. It is also found in some fungi, algae, yeasts.

Properties: White, amorphous, semitransparent mass; soluble in the common solvents; soluble in concentrated hydrochloric, nitric, and sulfuric acids.

Biological research.

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chloramphenicol. See chloral formamide.

See chloro in aceto-

Chloramine is an intermediate in the Rasching process for hydrazine (q.v.).

chloramine-B, $\text{C}_6\text{H}_5\text{SO}_2\text{NCINa}$ (sodium benzenesul-

-fornochloramine).

Properties: White powder with faint chlorine odor.

Derivation: Reaction of ammonia and para-

-benzenesulfochloride under pressure. The latter is reacted with sodium hypochlorite in the presence of an alkali and the chloramine produced by crystallization.

Hazard: Toxic by ingestion.

Use: Medicine.

chloramphenicol

$\text{NO}_2\text{C}_6\text{H}_5\text{CH}(\text{OH})\text{CH}(\text{CH}_2\text{OH})(\text{NHCOCHCl}_2$

D(-)-Threo-1-(para-nitrophenyl)-2-dichloracetamido-1,3-propanediol. An antibiotic derived from Streptomyces venezuelae or, by organic synthesis. It was the first substance of natural origin shown to contain an aromatic nitro group.

Properties: Fine, white to grayish-white or yellowish-white, needlelike crystals or elongated plates. Bitter to taste, neutral to litmus, and reasonably stable in neutral or slightly acidic solutions. M.p. 149-153°C; alcoholic solution is dextrorotatory while ethyl acetate solution is levorotatory. Very slightly soluble in water; freely soluble in alcohol, propylene glycol, acetone and ethyl acetate.

Grade: U.S.P.

Hazard: Has deleterious and often dangerous side effects. Must conform to FDA labelling requirements; use is closely restricted.

Uses: Medicine (antibiotic); antifungal agent.

chloramphenicol sodium succinate $\text{C}_{15}\text{H}_{16}\text{Cl}_2\text{N}_2\text{NaO}_4$.

Properties: Light yellow, crystalline powder. Freely soluble in water and alcohol.

Grade: U.S.P.

Use: Medicine. (See note under chloramphenicol).

chloranil (tetrachloroquinone; tetrachloro-para-benzo-

-quinone) $\text{C}_6\text{Cl}_4\text{O}_2$.

Properties: Yellow leaflets; m.p. 290°C; sp. gr. 1.97; soluble in alcohol, ether, and benzene; insoluble in water; good storage stability.

Derivation: From phenol, para-chlorophenol, or para-

-phenylenediamine by treatment with potassium chlorate and hydrochloric acid.

Hazard: Skin irritant. MCA warning label.

Uses: Agricultural fungicide; dye intermediate; elec-

trodes for pH measurements; vulcanizing agent.

chloranthrene yellow. See flavanthrene.

Superior numbers refer to Manufacturers of Trade Mark Products. For page number see Contents.